

CLAIMS

1. A method of treating a patient to stimulate chondrocyte proliferation *in vivo* which comprises the step of increasing the active concentration of amylin within said patient.
- 5 2. A method of treating a patient to stimulate cartilage growth and/or repair *in vivo* through stimulation of chondrocyte proliferation which comprises the step of increasing the active concentration of amylin within said patient.
3. A method of treating a patient to stimulate bone growth *in vivo* through stimulation of chondrocyte proliferation which comprises the step of increasing the active concentration of amylin within said patient.
- 10 4. A method according to any one of claims 1 to 3 wherein the active concentration of amylin is increased through administration of amylin to said patient.
5. A method according to any one of claims 1 to 3 wherein the active concentration of amylin is increased through administration of an amylin agonist.
- 15 6. A method of treating a patient to stimulate chondrocyte proliferation *in vivo* which comprises the step of administering to said patient amylin or an analog thereof in an amount effective to stimulate chondrocyte proliferation.
- 20 7. A method of treating a patient to stimulate cartilage growth and/or repair *in vivo* through stimulation of chondrocyte proliferation which comprises the step of administering to said patient amylin or an analog thereof in an amount effective to stimulate chondrocyte proliferation.
8. A method of treating a patient to stimulate bone growth *in vivo* through stimulation of chondrocyte proliferation which comprises the step of administering to said patient amylin or an analog thereof in an amount effective to stimulate chondrocyte proliferation.
- 25 9. A method according to any one of claims 6 to 8 wherein amylin is administered to said patient.

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10. A method according to any one of claims 6 to 8 wherein an analog of amylin is administered to said patient.
11. A method according to claim 10 wherein said amylin analog is amylin-(1-8).
12. A method of treating a patient to stimulate chondrocyte proliferation *in vitro* which comprises the step of increasing the active concentration of adrenomedullin within said patient.
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13. A method of treating a patient to stimulate cartilage growth and/or repair *in vivo* through stimulation of chondrocyte proliferation which comprises the step of increasing the active concentration of adrenomedullin within said patient.
14. A method of treating a patient to stimulate both growth *in vivo* through stimulation of chondrocyte proliferation which comprises the step of increasing the active concentration of adrenomedullin within said patient.
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15. A method according to any one of claims 12 to 14 wherein the active concentration of adrenomedullin is increased through administration of adrenomedullin to said patient.
16. A method according to any one of claims 13 to 15 wherein the active concentration of adrenomedullin is increased through administration of an adrenomedullin agonist.
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17. A method of treating a patient to stimulate chondrocyte proliferation *in vivo* which comprises the step of administering to said patient adrenomedullin or an analog thereof in an amount effective to stimulate chondrocyte proliferation.
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18. A method of treating a patient to stimulate cartilage growth and/or repair *in vivo* through stimulation of chondrocyte proliferation which comprises the step of administering to said patient adrenomedullin or an analog thereof in an amount effective to stimulate chondrocyte proliferation.
19. A method of treating a patient to stimulate bone growth *in vivo* through stimulation of chondrocyte proliferation which comprises the step of

administering to said patient adrenomedullin or an analog thereof in an amount effective to stimulate chondrocyte proliferation.

20. A method according to any one of claims 17 to 19 wherein adrenomedullin is administered to said patient.

5 21. A method according to any one of claims 17 to 19 wherein an analog of adrenomedullin is administered to said patient.

sub A4 22. A method according to any one of claims 17 to 19 wherein said adrenomedullin analog is adrenomedullin-(27-52).

10 23. A method of treating a patient to stimulate chondrocyte proliferation *in vivo* which comprises the step of activating a receptor localised on chondrocytes of said patient to which amylin and/or adrenomedullin binds.

24. A method of treating a patient to stimulate cartilage growth and/or repair *in vivo* through stimulation of chondrocyte proliferation which comprises the step of activating a receptor localised on chondrocytes of said patient to which amylin and/or adrenomedullin binds.

15 25. A method of treating a patient to stimulate bone growth *in vivo* through stimulation of chondrocyte proliferation which comprises the step of activating a receptor localised on chondrocytes of said patient to which amylin and/or adrenomedullin binds.

20 26. A method according to any one of claims 23 to 25 wherein the receptor which is activated is the adrenomedullin (ADM) receptor.

27. A method according to any one of claims 23 to 26 wherein receptor activation is effected through administration of a ligand which binds to and activates the receptor.

25 28. A method according to any one of claims 23 to 26 wherein receptor activation is effected through administration of amylin.

29. A method according to any one of claims 23 to 26 wherein receptor activation is effected through administration of an amylin analog.

sub A5 30. A method according to claim 29 wherein the amylin analog is amylin-(1-8).

31. A method according to any one of claims 23 to 26 wherein ADM receptor activation is effected through administration of adrenomedullin.
32. A method according to any one of claims 23 to 26 wherein receptor activation is effected through administration of an adrenomedullin analog.
33. A method according to claim 32 wherein the adrenomedullin analog is adrenomedullin-(27-52).
34. A method of stimulating chondrocyte proliferation *in vitro* which comprises administering an amount of amylin, adrenomedullin or an analog of either amylin or adrenomedullin to said chondrocytes which is effective in inducing chondrocyte proliferation.
35. A method according to claim 34 wherein an effective amount of amylin is administered.
36. A method according to claim 34 wherein an effective amount of an amylin analog is administered.
37. A method according to claim 36 wherein the amylin analog is amylin-1-8.
38. A method according to claim 34 wherein an effective amount of adrenomedullin is administered.
39. A method according to claim 34 wherein an effective amount of an adrenomedullin analog is administered.
40. A method according to claim 39 wherein the adrenomedullin analog is adrenomedullin-27-52.
41. The use of amylin or an analog thereof in the preparation of a medicament for effecting chondrocyte proliferation.
42. The use of adrenomedullin or an analog thereof in the preparation of a medicament for effecting chondrocyte proliferation.
43. The use of a ligand which binds to and activates a receptor localised on chondrocytes to which amylin and/or adrenomedullin binds in the preparation of a medicament for effecting chondrocyte proliferation.

44. The use of claim 43 wherein the ligand is one which binds to and activates the adrenomedullin (ADM) receptor.
45. The use of any one of claims 41 to 44 wherein the medicament is for the growth and/or repair of cartilage.
- 5 46. The use of any one of claims 41 to 44 wherein the medicament is for the growth of bone.
47. The use of claim 46 wherein the medicament is for effecting the lineal growth of bone.
48. The use of an amylin agonist in the preparation of a medicament for effecting chondrocyte proliferation.
- 10 49. The use of an adrenomedullin agonist in the preparation of a medicament for effecting chondrocyte proliferation.
50. The use of amylin-(1-8) in the preparation of a medicament for effecting chondrocyte proliferation.
- 15 51. The use of adrenomedullin-(27-52) in the preparation of a medicament for effecting chondrocyte proliferation.